DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018112
Date Inspected: 12-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	Yu Dong Ping			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: OBG/TOWER

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 11, OBG BIKE PATH (NWIT # 07321)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of an area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

BK004A6-020-001, 002, 165, 007, 073
BK004A8-020-001, 002, 130, 007, 073

BAY 10, OBG BIKE PATH (NWIT # 07326)

This QA inspector performed random Visual Testing (VT) of an area previously tested and accepted by ZPMC Quality Control personnel. The members are identified as OBG Components. The weld designations reviewed are as follows.

BK004A3-025-065, 067, 068, 100, 101, 102, 069, 070, 071, 103, 104, 105
BK004A4-025-085, 086, 087, 103, 104, 105

BAY 10, OBG BIKE PATH (NWIT # 07330)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

BK004A5-028-004, 007
BK004A3-028-005, 009
BK004A5-028-112, 115, 122, 125

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 10

TOWER FACADE PLATE
SMAW welding of weld joints 001, 002 & 003 located on ND1-SFSA4-015.
Welder is identified as 040365. ZPMC QC is identified as Mr. Wang Hao.
The welding variables recorded by QC appeared to comply with WPS-B-P-2112-PADEYE.

SMAW welding of weld joints 031 & 032 located on ND1-SFSA4-090-2.
Welder is identified as 050638. ZPMC QC is identified as Mr. Wang Hao.
The welding variables recorded by QC appeared to comply with WPS-B-P-2114.

OBG BIKE PATH, CLOSURE PLATE
FCAW welding of weld joints 002 & 007 located on BK004A6-028.
Welder is identified as 040533. ZPMC QC is identified as Mr. Li Jun.
The welding variables recorded by QC appeared to comply with WPS-B-T-2332-Tc-P4-F.

FCAW welding of weld joints 001 & 165 located on BK004A6-028.
Welder is identified as 040533. ZPMC QC is identified as Mr. Li Jun.
The welding variables recorded by QC appeared to comply with WPS-B-T-2333-Tc-P4-F.

OBG BIKE PATH, END PLATE
SMAW welding of weld joint 044 located on BK004A1-031.
Welders are identified as 052493, 057258 & 500363. ZPMC QC is identified as Mr. Li Jun.
The welding variables recorded by QC appeared to comply with WPS-B-P-2214-B-U2.

OBG BIKE PATH, CENTRE PLATE
FCAW welding of weld joints 041 & 042 located on BK004A6-031.
Welder is identified as 040302. ZPMC QC is identified as Mr. Li Jun.
The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

During the Quality Assurance Visual Testing (VT) verification of welds located on vertical and horizontal anchor house plate of OBG bike path BK004A-025, this Quality Assurance (QA) Inspector discovered the following issues:

-The thickness of the horizontal anchor house plate (BKX10F) is found less than required thickness.
-As per shop drawing the required nominal thickness of the horizontal anchor house plate (BKX10F) is 20mm.
-The actual thickness of the BKX10F plate welded was found approximately 16mm.
-The material grade for the 16mm horizontal plate is unknown.
-This plate is located at east side of stringer plate 9C.
-The horizontal anchor house plate (BKX10F) joining the vertical anchor house plates and centre plate (BKX11L).

-The weld numbers are identified as; BK004A4-025-080, 100, 082, 101 and BK004A4-025-083, 102 respectively.
-The member is located in Bay 10.
-Attached photographs provide additional location details.

The Notice of Witness Inspection Number (NWIT) is 07326. These areas have been previously tested and accepted by ZPMC Quality Control (QC) personnel. This issue has an incident report.

BAY 11

TOWER BRACKET
SMAW welding of weld joint 002B located on ND1-BRSA5-2.
Welder is identified as 040724. ZPMC QC is identified as Mr. Xu Jie.
The welding variables recorded by QC appeared to comply with WPS-B-T-3213-Tc-U4b.

OBG BIKE PATH, BOTTOM COVER PLATE
FCAW welding of weld joint 013 located on BK004A2-020.
Welder is identified as 205649. ZPMC CWI is identified as Yu Dong Ping.
The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

OBG BIKE PATH, PLUG WELD OF BOTTOM COVER PLATE
SMAW welding of weld joint 014 & 015located on BK004A2-020.
Welder is identified as 066155. ZPMC CWI is identified as Yu Dong Ping.
The welding variables recorded by QC appeared to comply with WPS-B-P-2112-PLUG.

OBG BIKE PATH, END PLATE REPAIR (B-WR16775)
SMAW welding of weld joint 043 located on BK005A1-003.
Welder is identified as 040655. ZPMC CWI is identified as Yu Dong Ping.
The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-REPAIR.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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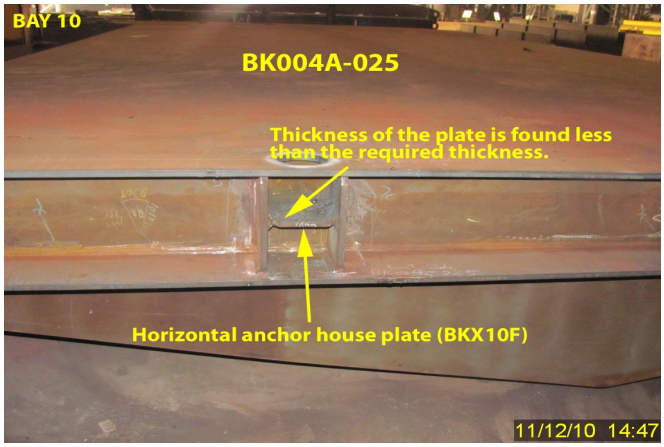

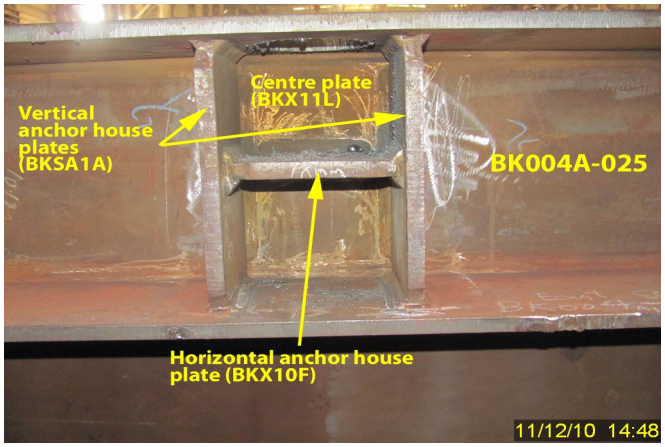

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372/ Thomas Ho - 150002048250, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer